

# South Bay Cities Council of Governments

December 8, 2014

**TO:** SBCCOG Steering Committee

**FROM:** Steve Lantz, SBCCOG Transportation Director

**RE:** SBCCOG Transportation Update – December 2014

**Adherence to Strategic Plan:**

***Goal A: Environment, Transportation and Economic Development.*** Facilitate, implement and/or educate members and others about environmental, transportation and economic development programs that benefit the South Bay.

**FOLLOW THE MONEY...**

**FEDERAL**

**Lame Duck / New Congress Federal Transportation Funding Strategies Differ**

Following the November 4<sup>th</sup> elections, a predictable bi-furcated strategy for long-term federal transportation funding is being touted. The federal Highway Trust Fund is set to run dry on May 31, 2015. An estimated \$6.5 billion would keep highway projects afloat and construction workers employed until the 2015 fiscal year ends Sept. 30, 2015. It would take about \$100 billion in additional revenue to fund a six-year transportation bill.

To fund the gap would require consensus to be reached on a significant tax increase, on the order of bumping up federal diesel taxes by 15 cents a gallon and gas by 10 cents. As a result, the major challenge falls to the House and Senate Finance Committees rather than the respective Transportation Committees.

Democrats are calling for a solution to be enacted by the lame duck Congress before the end of the current Congressional session in December. U.S. Sen. Tom Carper (D-Del.), who chairs the Environment and Public Works Subcommittee on Transportation and Infrastructure, believes the lowered fuel prices provide a window of opportunity for lawmakers to endorse a bipartisan deal. He has proposed a four year bill with a 12 cent-a-gallon increase in the gas tax, and a 20-cent increase a gallon for diesel. The tax would be indexed to increase with inflation going forward.

However, with the change in leadership coming in January, the Republicans are looking to pass a major surface transportation bill during the first six months of the next Congressional session. They have yet to coalesce around new taxes for transportation as a top priority since they would likely require offsetting tax reductions for any proposed tax increases.

### **House Democrat pushes for transit tax break revival**

In another lame duck proposal, Rep. Dan Lipinski (D-Ill.) is pushing lawmakers to revive a tax break for commuters who take public transportation to work that was cut at the beginning of this year. The amount of their monthly incomes that transit riders are allowed to set aside before taxes for their commutes to work was reduced from \$240 to \$130 in January, over the objection of public transit advocates who argued that a similar tax break for drivers who park in garages was not reduced.

The transit tax break was originally increased to \$240 in the 2009 economic stimulus package. The benefit was reduced when the stimulus ended in 2011, but it was later restored in the 2012 bill to push back the implementation of sequestration until early 2013. The extension was only for one year, however, so the benefit returned to \$130 again on Jan. 1. Thus far, House Republican leaders have shown little appetite for embracing this proposal either.

However, in a study released Tuesday November 18<sup>th</sup>, two groups argue that the entire system of tax breaks for drivers and transit users should be overhauled. Frontier Group, a clean-environment think tank in California, and TransitCenter, a New York organization that describes itself as “an independent civic philanthropy” dedicated to improving public transportation, recommended that Congress scrap the tax break for parking and make wholesale changes to the transit benefit. The report says that the parking benefit tends to be unavailable to low-income workers because, in many cases, their employers don’t participate in the program.

To make the transit benefit more widely available, the report recommends that the federal government explore replacements such as refundable tax credits for transit expenditures so that workers at organizations that do not offer a transit benefit program would still be able to take advantage of the tax savings. The report also recommends that tax benefits be extended to people using emerging modes of transportation including various models of car-sharing and bike-sharing.

## **REGIONAL**

### **Kinkisharyo To Continue To Build Metro’s Light Rail Vehicles in Palmdale**

Kinkisharyo International reached an agreement on November 25<sup>th</sup> with labor and community groups that will keep light rail manufacturing jobs in Palmdale and not take them out of state, a change from late October when the company said it would build its plant outside of California. Kinkisharyo is currently doing final assembly work on an order of 78 cars for the Los Angeles Metro, in hangar space it leases from Los Angeles World Airports in Palmdale.

Kinkisharyo International, the El Segundo-based U.S. arm of Kinki Sharyo Co. Ltd. of Osaka, received a contract in 2012 from Metro for the initial order of 78 light rail cars, and options for an additional 97 cars. If options for another 60 cars are exercised by the Metro board the total contract with Kinkisharyo would be about \$890 million.

Kinkisharyo has agreed to take a neutral position on whether its approximately 250 employees in Palmdale can unionize and it will work with Jobs to Move America Coalition on readiness training programs for veterans, women and other disadvantaged workers to be qualified for the manufacturing jobs.

Metro needs a major shipment of new vehicles for two new light-rail routes to Santa Monica and Azusa, to avoid delayed opening of the two new segments which are scheduled in 2016.

## **TRANSPORTATION INNOVATION: STARTS AND STOPS ...**

### **Uber's Smartphone Data Gathering Capacity Raises Privacy Concerns**

Uber and other firms that use smartphones to monitor customers' movement without their knowledge is exposing a gap in the nation's privacy laws. Unlike some other types of data, regulators currently cannot limit what companies are able to do with information about customers' location, which could show where people live, work and travel.

While it is legal for a company to collect, review and share information about a customer's location without their affirmative consent, it is illegal for a company's policies to be "unfair and deceptive" to consumers, a tricky and hard to define term that is enforced by the Federal Trade Commission (FTC). Uber has brought on privacy experts to conduct an in-depth review and assessment of our existing data privacy program and recommend any needed enhancements.

### **State Appeals Court Finds SANDAG RTP/SCS EIR Inadequate**

The California Court of Appeals on November 24<sup>th</sup> confirmed a lower court ruling that the environmental impact report (EIR) prepared by the San Diego Association of Governments (SANDAG) for San Diego's long-range regional transportation plan was inadequate because it underplayed the impact of the emissions that would result from its highway-building, sprawl-inducing plan.

SANDAG approved its regional transportation plan in October 2011. It was touted as the first transportation plan in California to be completed under the auspices of S.B. 375, which mandates regional plans to include sustainable communities strategies that reduce greenhouse gas emissions. Under the transportation plan as currently written, emissions in 2050 would be almost seven times higher than state climate change targets.

A California Superior Court judge declared in 2012 that the EIR failed to acknowledge how the plan will reduce greenhouse gas emissions. The appellate decision says there are other problems with the environmental review. For example, highway expansions will increase pollution in nearby neighborhoods, but the SANDAG plan failed to connect the dots between that pollution and its public health impacts. The court also ruled that SANDAG failed to consider alternatives that could help reduce driving.

### **Metro Authorizes Study To Expand L. A. ExpressLanes Network**

On November 20<sup>th</sup>, the L. A. Metro board voted to examine future ExpressLanes. Future freeways being studied for toll lanes include the I-405, I-5, I-210 and extensions of the current ExpressLanes on I-110 and I-10 freeways. The study is expected to be completed by June 2015.

## TRANSIT / RIDESHARING / CARSHARING

### **TRANSFORMATIVE TRANSPORTATION PLANNING ...**

#### **Are Self-Driving Vehicles Coming Around The Corner?**

The People and Technology 2014 Forum held in November at Georgia Tech featured a panel discussion of automotive and technology experts on when self-driving cars might come to market. On the heels of Google's much-heralded driverless car development program, Tesla claimed it will be the first company to market with significant autonomous driving function in the vehicles. Cadillac announced it will introduce a nearly self-driving car in 2017, featuring a "super cruise" feature that allows hands- and feet-free driving on both freeways and in stop-and-go traffic.

Experts on the Georgia Tech panel said the question of when depends on what is meant by "self-driving" — Google's no-steering-wheel vision; the vision other auto executives of a car with a "pilot" but which can operate in "autopilot mode" for long periods; or something else.

Many of the technology components and systems needed to make driverless cars commercially available are already in use. Some cars already can brake themselves, know when another vehicle is near, stay connected to communications networks or park themselves. In exchange for potential price discounts, insurance companies are getting drivers to track their driving with small dongles connected to the car diagnostic port. Some cars have their own WiFi hotspots, and Apple wants to bring its mobile operating system to the dashboard. Google has plans to build 100 prototypes of its cars without steering wheels and pedals.

"All major manufacturers have announced some level of autonomy by 2020," Leddy said. "Within five years, it is likely we'll be seeing self-driving cars on the road but with a driver."

Some panelists see self-driving cars on the road with a driver within five years but fully-autonomous connected cars taking 20 to 30 years.

One barrier to a quick transition is the new car absorption rate: there are 254 million vehicles on U.S. roads, only about 7 percent are connected in any manner, and only about 16 million new cars are sold each year. Yet some panelists said there are market segments that may adapt to the technology sooner. For example, one panelist said there could be strong benefits for young drivers using self-driving cars, as well as senior drivers and the visually impaired. Others on the panel predicted the cost-benefit analysis for companies owning fleets of vehicles — such as long-haul freight trucks that wouldn't have to stop for sleep breaks — would be extremely attractive. Another possibility for acceleration of the transition may occur if the whole concept of vehicle ownership is disrupted. With no driving, would using an Uber-type ride-sharing service become more popular? A car-sharing executive said he could envision a time in the future when all car-sharing was done in driverless vehicles.

Barriers include "bad decision making" by the automated systems, unmanageable chaos in the driving environment, liability issues, privacy issues and the possibility of the car becoming just another device that can be hacked.

Where will the vehicles appear first? A panelist suggested that the audience look in “closed communities” — such as retirement and golf communities — to get the first glimpse of widespread use of self-driving vehicles. That golf cart might be replaced by a self-driving vehicle.

### Millennials Are Driving Less; Will The Trend Continue?

The Center for Urban Transportation Research at the University of South Florida evaluated 2009 national travel survey data to isolate the ten 10 biggest factors comparing Millennial travel behavior to Boomers. While the reasons may provide indicators as to current behavior, it is less clear whether the trend will continue.

There's no arguing with the numbers: Every American age group drove less in 2009 than in 2001, but the gaps were strikingly high in the 20- to 40-year-old segments of the population. Millennials in 2009 traveled fewer miles than drivers did at the same age in 2001.

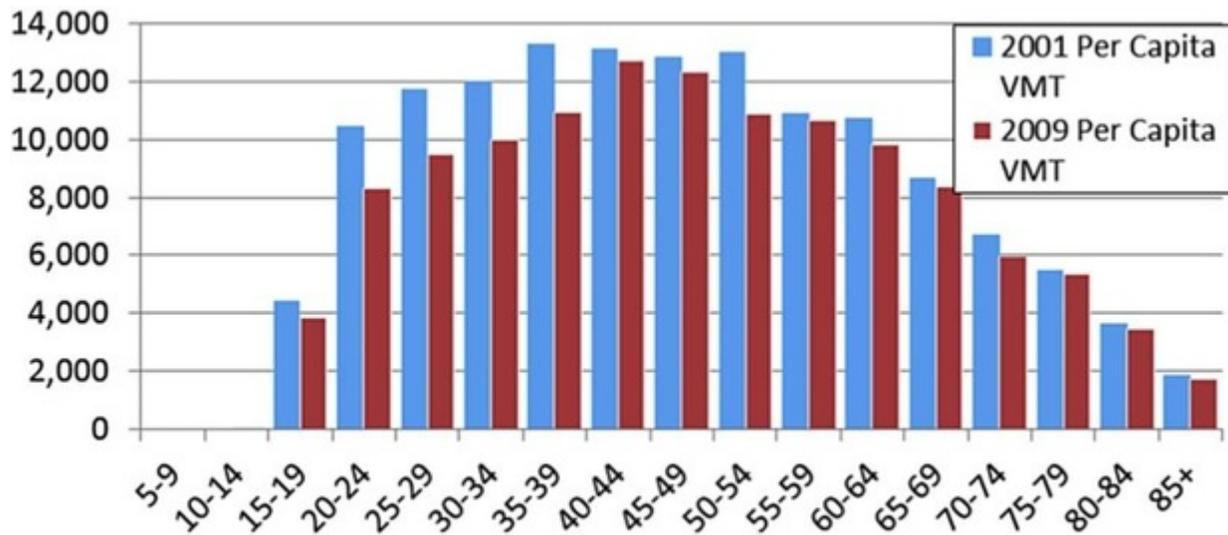


Fig. 4. NHTS person miles of travel change. Source: Author's analysis of NHTS.

Long-term patterns are not predictable from the data. According to the study, anyone offering more certainty on the future behavior of Millennials is likely looking into the numbers and seeing their own present beliefs extended into the future. Ten key findings from the survey include:

1. *Place of residence.* A shift of 18- to 30-year-olds has occurred from rural areas to cities. For towns and rural areas the share today is 14 percent, compared with 26 percent for Boomers. Given how much more driving occurs in non-metro areas, the shift into metros alone likely explains much of the overall decline.

2. *Race/ethnicity.* White Americans tend to drive more than other races and ethnicities do. There were 10 million fewer whites aged 20-to-39 in 2009 than in 1990, according to the study team—a 16 percent change. If that diversity continues to grow, driving habits might continue to drop.

3. *Education.* Well-educated people tend to drive more than those who aren't. Millennials are very well-educated, especially compared with Baby Boomers, and are staying in school longer. As 20- to 39-year-olds complete their education and enter the work force, vehicle mileage might increase. Of course, that also assumes they can pay down their enormous student loan debts and still have money left over for a home or a car.

4. *Income.* People who make more tend to drive more. Although Millennials aren't making very much right now, in an unexpected trend, Millennials making a lot of money don't seem to be driving much more than those making very little. The over \$100,000 category is the same as the \$50-54,000 range, which isn't much higher than the \$30-34,000 (i.e. intern) range.

5. *Living arrangements.* Traditionally, people who own single-family homes unsurprisingly drive a lot more than people who rent apartments. With lots of Millennials beginning their adult life in their parents' homes—this described about 36 percent of 18- to 31-year-olds in 2012, compared with 32 percent in 1968—where they go after they fly from the nest may influence how much they will drive.

6. *Lifecycle delay.* People are marrying later in life: between 1970 and 2012, age at marriage increased from about 23 to 29 for men and nearly 21 to 27 for women. Meanwhile, a woman's age at the time she had her first child increased from 21 to nearly 26 over the same period. Yet two-person households drive more than solos do across the board, especially when they have a young child. The big question is not so much whether the solos in these cohorts will drive more once they start families, but whether they'll start traditional families at all.

7. *Licenses.* Graduated license programs have led to a decline in the share of licensed drivers under age 35—down from 46 percent in 1981 to 30 percent in 2012. Even if these Millennials get a license eventually, the question again becomes whether their non-driving habits will carry over into later years as a lifestyle preference.

8. *Car-ownership.* Whether or not you have a car has an enormous impact on how much you drive, even among Millennials, as the figures below show. If nothing else, Millennials seem less infatuated with cars as status symbols than Boomers were.

9. *Environmental values.* While it's often presumed that Millennials have more respect for the environment than previous generations did, and thus a motivation to find cleaner ways of travel, that's not entirely clear in the data. Pew surveys have shown that Millennials are less likely to consider themselves environmentalists, compared to other age segments. Then again, the study notes that it's possible to interpret these figures to mean Millennials take environmental awareness as a given that need not be expressed.

10. *Technology.* It's been said (and challenged) that one reason Millennials don't drive as much is that they connect through technology rather than geography. No one doubts that technology is a native language for Millennials. The problem for transport predictions is that technology can just as easily expand car travel (think: the ease of using Uber to meet up with a friend, or the ease of ordering a delivery). The unknown is whether total trips will be reduced by technology or shifted to another vehicle.

### **Study Links Walkable Neighborhoods to Prevention of Cognitive Decline**

Older adults who live in walkable neighborhoods stay in better shape, physically and mentally, than those who live in car-dependent areas, according to a new study presented on November 8<sup>th</sup> to the Gerontological Society of America. The study concluded that subjects living in walkable neighborhoods, from both groups, had lower body mass index, healthier metabolisms, and better memory and cognition. This was particularly true in neighborhoods that had complicated paths to destinations.

Older adults are less likely to get regular exercise than the general population, but walking is one form of activity that is considered safe and healthy for people with Alzheimer's. Neighborhood attributes like good sidewalks, generous crossing time at intersections, benches, and closely spaced parks and destinations can help encourage older people to walk for transportation.

University of Kansas assistant professor Amber Watts examined 26 subjects with mild Alzheimer's Disease and 30 healthy control subjects. She tracked health outcomes over two years, controlling for home price, income, gender, and education.

### **Dutch City Installs World's First Solar-Powered Bike Lane Pilot Project**

The world's first solar-powered bike path opened on November 12<sup>th</sup> in Krommenie, a town northwest of Amsterdam. Being a pilot project, the lane is only 230 feet long (though it'll stretch to 328 feet when finished).

The pilot road consists of concrete modules each of 2.5 by 3.5 meters. Solar cells are fitted in one travelling direction underneath a tempered glass top layer, which is approximately 1-cm thick. There are no solar cells on the other side of the road and this is used to test various top layers. In time, the solar power from the road will be used for practical applications in street lighting, traffic systems, electric cars (which drive on the surface) and households.

Visually, the surface of the solar roadway looks like the glassy cooking element on an electric stove. It's outfitted with a friction-enhancing rippled surface so riders won't slide off. Two downsides: because it can't be angled toward the sun, it's less efficient than solar panels; and, it's hugely expensive at an expected cost of \$3.7 million per kilometer.

SolaRoad, the consortium behind the project, envisages that solar roads could eventually be used to power electric vehicles that use them. Roads can generate power where it is needed and sensors in the roadway can gather traffic information and provide automatic vehicle guidance.